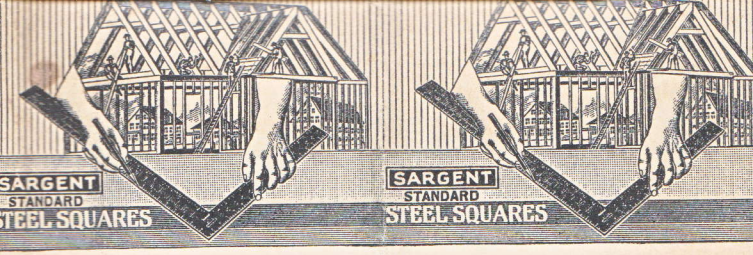

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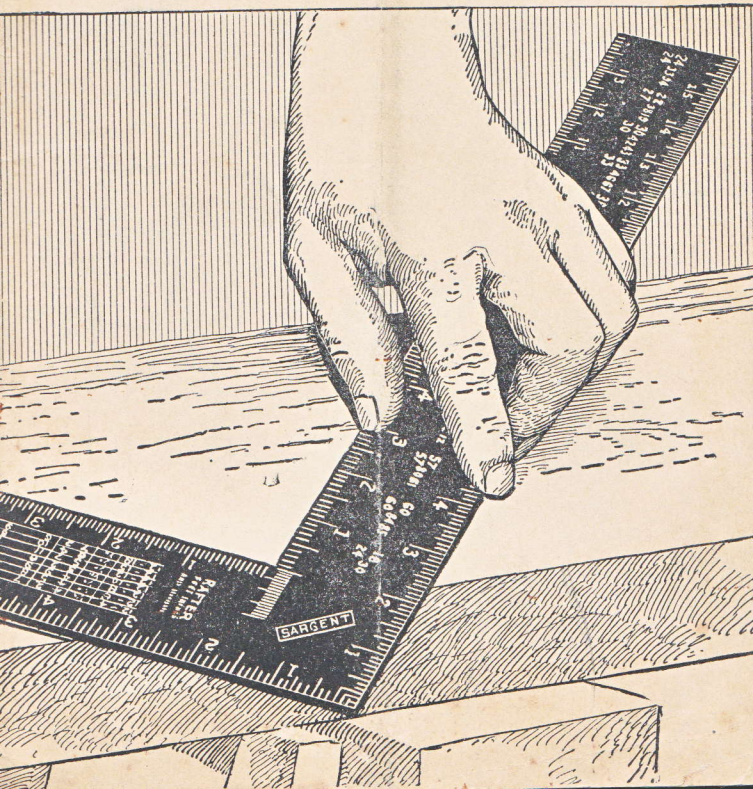
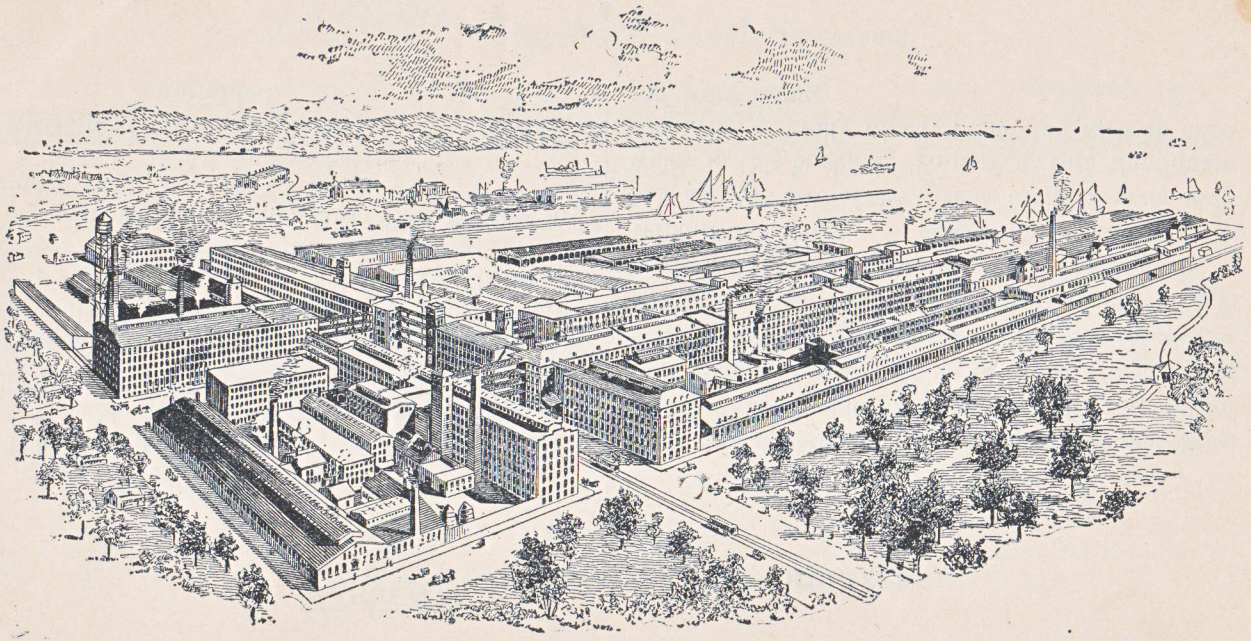
STANDARD STEEL SQUARES





SARGENT REG. U. S. PAT OFF. Standard Steel Squares

Quality

The Sargent Steel Square, standard the world over, is made from high grade tool steel and is carefully tested for trueness and accuracy of marking. The Square is made by an improved process which insures durability and at the same time an even taper, so that the proper balance or "hand" is secured.

All genuine Sargent Standard Steel Squares are stamped thus:

SARGENT

All Squares bearing these stamps are fully warranted.

SARGENT V·B·M

How Used

On construction work of any sort the Steel Square is invaluable for accurate measuring and for determining angles. Owing to the great variety of markings, the Sargent Square is adapted for almost any purpose that a carpenter might require. It is made with every division commonly used, down to 1-100th of an inch. A description of these markings and the uses of the various tables is given elsewhere in this booklet. To prevent rust the Square should be carefully wiped, preferably with an oiled rag, after using.

SARGENT
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Standard Steel Squares

Because it was "The most complete and decidedly the most convenient Square for the operative workman in the market," the Sargent Square No. 100 was selected by Fred. T. Hodgson, the author, to solve the problems shown in the well-known book 'The Steel Square and Its Uses," which is a standard authority on the subject.

Mr. Hodgson has this to say about our No. 500 Squares:

"The Last Word on Steel Squares"

"Sargent and Company are putting on the market a new Steel Square which they have dubbed 'Our Framing Square No. 500R.' We have a sample of this tool before us as we write and have closely examined it, as we are interested in anything pertaining to steel squares, having studied them from our infancy, and after going over the figuring on the blade and tongue of this instrument, we are astonished at the great advance made in the making and adaptation of this wonderful tool in interests of working men, within the last fifty years.

"This latest production of the tool seems to be 'The very last word on Steel Squares.' The figured rules on the blade and tongue cover almost everything the square is capable of and make a veritable set of tables which show its uses in solving many different problems.

"The instrument is an excellent piece of workmanship, from both a mechanical and artistic point of view."

The description on the following pages shows which tables and scales are used with the various Squares, so that the reader will know what number Square to ask for in the hardware store.

SARGENT
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Framing Squares

For sizes and markings, see page 12.

Framing Squares, Nos. 500R, 503R and Take-Down Squares No. 600R, give lengths of Common Rafters; Hip, Valley, Jack and Cripple Rafters; also all top, bottom and side cuts.

Nos. 500R, 503R and 600R Squares, to meet the trade demand, are made with a 1¾ inch tongue to conform to the common substitution of 3 x 1¾ scantling for 4 x 2. This comprehensive line is still more attractive to the carpenter as framing squares, in having our new table (patented July 7, 1914) for Hip, Valley and Jack Rafters, in addition to our well-known patented table for common rafters.

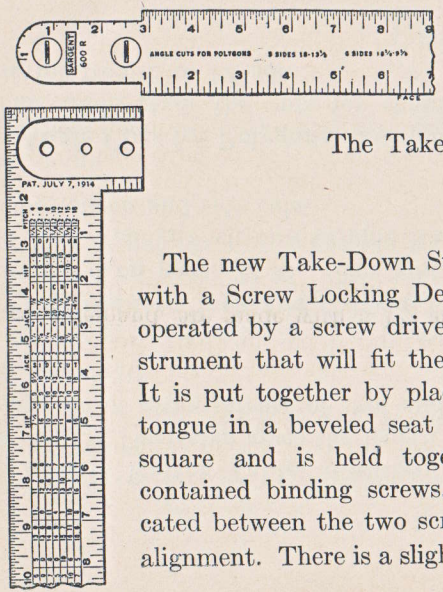
The Standard Brace Measure is also included, and on Nos. 500R and 600R there is a new table of cuts for the common polygons.

They are the only Squares made requiring no figuring by the carpenter, saving his time, and also avoiding possible errors, as there are no calculations to make. The required figures are all given in the rafter tables on the Square, are for ordinary widths of buildings having roofs of common pitches, and have been carefully and accurately prepared.

On the face of the Square is the table for lengths and cuts of Hip, Valley and Jack Rafters.

100th Scale

Remember that our 100th scale on our highest grade Squares has a special feature, only found on Sargent Squares, in combining the 100th scale with the tongue graduation, so that so many 100ths with so many inches may be laid off at once with a pair of dividers.



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Take-Down Standard Steel Squares

For sizes and markings, see page 12.

The Take-Down Steel Square No. 600 R has the same tables and graduations as Framing Squares No. 500 R.

The new Take-Down Steel Square is made with a Screw Locking Device which is easily operated by a screw driver or coin or any instrument that will fit the slot in the screws. It is put together by placing the end of the tongue in a beveled seat on the body of the square and is held together by two self-contained binding screws. A dowel pin, located between the two screws, insures perfect alignment. There is a slight clearance between the body and tongue when locked which will take up any slight wear and the screws are case-hardened to withstand hard usage. The square can be taken apart easily even if rusted, as the tongue lifts out of the seat in the body when the screws are loosened. There are no parts to lose as the screws are self-contained.

Each Take-Down Steel Square is packed in an enameled, water-proof case.

Scales and Tables

Patent Rafter Table, described on pages 20 and 21. This table gives the length of rafters for any one of seven pitches of roof and for buildings of any width.

Hip, Valley, Jack and Cripple Rafter Table, described on pages 22-26. This table gives length of Hip, Valley, Jack and Cripple Rafters; also all top, bottom and side cuts.

Angle Cuts for Polygons, described on page 27. This table gives the cuts for common polygons having from 5 to 12 sides.

Octagon "Eight-Square" Scale, described on page 29. This scale is used for laying off lines to cut an "eight-square" or octagon stick of timber from a square one.

Brace Measure, described on page 28. This measure gives the length on common braces; its use will be easily understood by a reference to page 28.

Essex Board Measure, described on page 30. This measure gives the contents in feet and inches of boards of various lengths and widths.

Explanation of the Letters

used in these pages to show how Sargent Squares are marked:

Face of Square:	**A,**	Face of Body, Outside.
	B,	" " " Inside.
	C,	Face of Tongue, Outside.
	D,	" " " Inside.
Back of Square:	**E,**	Back of Body, Outside.
	F,	" " " Inside.
	G,	Back of Tongue, Outside.
	H,	" " " Inside.

The "Face" of the Square is the side upon which the name "Sargent" is stamped.

The Reverse side is the "Back." The larger arm is the "Body" or "Blade" and the shorter arm the "Tongue."

Squares with 18-inch Tongue

of the following numbers are made regularly and can be furnished at the same price as 16 inch tongue:

Nos. 3, 3B, 3N

Finishes

Sargent Squares are finished in five different finishes as follows:

Royal Copper (C). This is a rich red finish with white markings. It is applied by a secret process with copper as a basis. It is durable and the most striking of all finishes.

The following numbers can be furnished in this finish:

		Each
No. **100 C,**	Same Figures and Marks as No. 100.	$4.70
No. **100 CR,**	" " " " " " 100 R.	5.20
No. **500 CR,**	" " " " " " 500 R.	5.70
No. **600 CR,**	" " " " " " 600 R.	8.50

Blued with white markings (B). A dark blue-black finish put on by a special process. Owing to the contrast between the blue and white enamel, these Squares are easily read even in a bright light. The finish is a particularly durable one.

The following numbers can be furnished in this finish:

		Each
No. **3 B,**	Same Figures and Marks as No. 3.	$4.00
No. **12 B,**	" " " " " " 12.	3.20
No. **14 B,**	" " " " " " 14.	3.60
No. **30 B,**	" " " " " " 30.	3.60
No. **100 B,**	" " " " " " 100.	4.30
No. **100 BR,**	" " " " " " 100 R.	4.60
No. **500 BR,**	" " " " " " 500 R.	5.20
No. **503 BR,**	" " " " " " 503 R.	4.20
No. **600 BR,**	" " " " " " 600 R.	7.90

Nickel Plated (N). This finish is durable, as nickel does not corrode readily, moisture and ordinary acids having no effect on it.

The following numbers can be furnished in this finish:

		Each
No. **3 N,**	Same Figures and Marks as No. 3.	$3.80
No. **12 N,**	" " " " " " 12.	3.10
No. **30 N,**	" " " " " " 30.	3.60
No. **100 N,**	" " " " " " 100.	4.20
No. **500 NR,**	" " " " " " 500 R.	5.00

Galvanized with red markings (VG). This finish is the most durable of all, being nearer rust-proof than any of the others. The figures and letters are brought out by red enamel, which makes a marked contrast with the gray of the galvanizing and is easily read.

The following numbers can be furnished in this finish:

		Each
No. **3 VG,**	Same Figures and Marks as No. 3.	$4.00
No. **100 VG,**	" " " " " " 100.	4.30
No. **100 VGR,**	" " " " " " 100 R.	4.70
No. **500 VGR,**	" " " " " " 500 R.	5.20

Polished (100, etc). A high finish which removes all roughness from the metal.

For the numbers that can be furnished in this finish, see pages 12, 13, 14 and 15.

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Standard Steel Squares

Framing Squares

Two Feet Framing Squares, Polished Steel

Patented July 7, 1914

Body, 24×2 Inches; Tongue, 16×1¾ Inches

Nos.	Price Each	How Marked							
		Face				Back			
		A	B	C	D	E	F	G	H
500 R	$4.40	1/16	1/8	1/16	1/8	1/12	1/32	1/12	1-10 & 100's
503 R	3.40	1/16	1/4	1/16	1/4	1/12	1/4	1/12	1/4

Take-Down

Two Feet Framing Squares, Polished Steel

Patented Oct. 7, 1913, Dec. 22, 1914, Jan. 26, 1915 and May 11, 1915
Other Patents pending

Body, 24×2 Inches; Tongue, 16×1¾ Inches

No.	Price Each	How Marked							
		Face				Back			
		A	B	C	D	E	F	G	H
600 R	$7.10	1/16	1/8	1/16	1/8	1/12	1/32	1/12	1-10 & 100's

Additional Marks and Scales

Nos. **500 R**, **600 R**:
- Brace Measure and Patent Rafter Table
- Table for Hip, Valley, Jack, Cripple Rafters
- Table of Cuts for common Polygons

No. **503 R**:
- Brace Measure and Patent Rafter Table
- Table for Hip, Valley, Jack, Cripple Rafters

SARGENT Standard Steel Squares

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Rafter Squares

Two Feet Rafter Squares, Polished Steel

Patented July 5, 1900

Body, 24×2 Inches; Tongue, 16×1½ Inches

No.	Price Each	How Marked							
		Face				Back			
		A	B	C	D	E	F	G	H
100 R	$3.80	1/16	1/8	1/16	1/8	1/12	1/32	1/12	1/10

Additional Scales and Tables

No. **100 R,** Brace, 8 Square and Patent Rafter Table

Two Feet Squares, Polished Steel

Body, 24×2 Inches; Tongue, 16×1½ Inches

Nos.	Price Each	How Marked							
		Face				Back			
		A	B	C	D	E	F	G	H
100	$3.50	1/16	1/8	1/16	1/8	1/12	1/32	1/12	1-10 & 100's
3	3.10	1/16	1/4	1/16	1/4	1/12	1/4	1/12	1/4
14	2.80	1/8	1/4	1/8	1/4	1/4	1 in.	1/4	1/4

Additional Scales and Tables

No. **100,** Brace, 8 Square and Essex's Board Measure

No. **3,** Brace and Essex's Board Measure

No. **14,** Essex Board Measure

SARGENT Standard Steel Squares

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18 Inch Squares, Polished Steel

Body, 18×1½ Inches; Tongue, 12×1 Inches

No.	Price Each	How Marked							
		Face				Back			
		A	B	C	D	E	F	G	H
30	$2.80	1/16	1/4	1/16	1/4	1/12	1/4	1/12	1/4

12 Inch Squares, Polished Steel

Body, 12×1½ Inches; Tongue, 8×1 Inches

Nos.	Price Each	How Marked							
		Face				Back			
		A	B	C	D	E	F	G	H
10	$2.20	1/8	1/4	1/8	1/4	1/12	1/4	1/12	1/4
12	2.50	1/16	1/8	1/16	1/8	1/12	1/8	1/12	1/8

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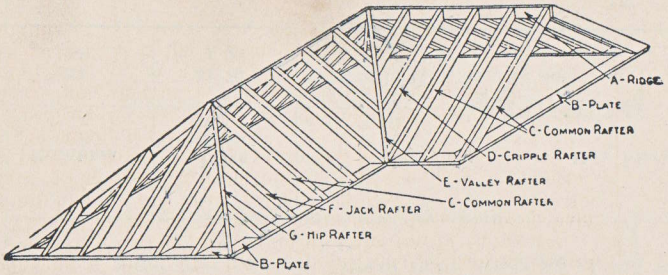
Standard Steel Squares

Two Feet Squares

Polished, Not Tapered

Numbers	Price Each	How Marked	Size in Inches	
			Body	Tongue
22	$1.70	Marked in 1/8ths on both sides	24 × 1½ In.	12 × 1 In.
24	1.90	" " 1/8ths " " "	24 × 2	12 × 1½

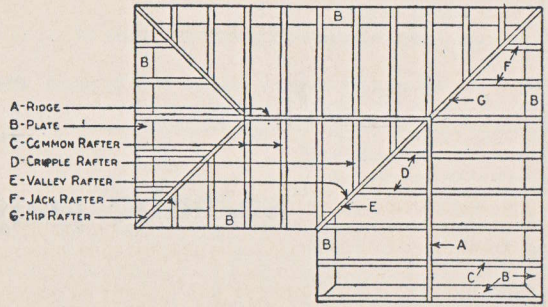


The illustration shows the frame of a roof, showing:

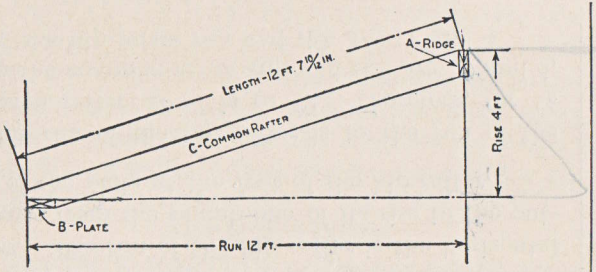
Ridge	A
Plate	B
Common Rafters	C
Cripple Rafters	D
Valley Rafter	E
Jack Rafters	F
Hip Rafter	G

Roof Frame.

Showing Different Kinds of Rafters.



Common Rafters.



The RISE of the roof is the vertical distance found in following a plumb-line from a point, on the central line of the top of the ridge, to the level of the top of the plate.

The RUN is the shortest horizontal distance from said plumb-line to the nearest point on the outer edge of the plate. The diagonal from this point on the plate to the nearest point in the central line of the top of the ridge is the length of the common rafter.

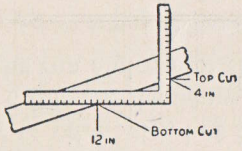
Because the rise must be measured at the central line of the roof, the run is always half the outside width of the building.

The PITCH is the relation of the rise to the width of the building.

A roof of 4 feet rise on a building 24 feet wide is called a roof of 1/6 PITCH. This roof will have a run of 12 feet, or for each 12 inches of run, the rise is 4 inches.

We, therefore, have common pitches, 1/6 pitch or 12 to 4, 1/4 pitch or 12 to 6, and 1/3 pitch or 12 to 8, etc.

The rafter ends are cut to roof angles to rest respectively against ridge and plate. The cut against the ridge is called the TOP CUT or PLUMB CUT; the cut against the plate is called the BOTTOM CUT or HEEL CUT.



The points for making TOP and BOTTOM CUTS are found by placing the square upon the rafter so that a portion of one arm of the square represents the run and a portion of the other arm represents the rise; for common rafters 12 and 4 for 1/6 pitch, 12 and 6 for 1/4 pitch, etc.

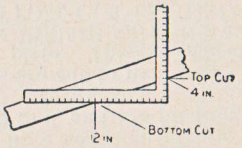
Hip (or Valley) Rafters.

The hip rafter (G) represents the hypothenuse or diagonal of a right-angle triangle, one side being the common rafter (C), and the other side the plate (B), or that part of the plate lying between the foot of the hip rafter and the foot of the adjoining common rafter.

The rise of the hip rafter is the same as common rafter. The run of the hip rafter is the horizontal distance from the plumb-line of its rise to the outside of the plate at the foot of the hip rafter.

This run of the hip rafter is to the run of the common rafter as 17 is to 12. Therefore, for $\frac{1}{6}$ pitch the common-rafter run and rise are 12 and 4, while the hip-rafter run and rise are 17 and 4.

For the top and bottom cuts of the common rafter, the figures are used that represent the common-rafter run and rise, that is, 12 and 4 for $\frac{1}{6}$ pitch, and 12 and 6 for $\frac{1}{4}$ pitch, etc., but for top and bottom cuts of hip rafter use the figures 17 and 4, and 17 and 6, etc., the run and rise of the hip rafter.



Valley Rafters.

The VALLEY RAFTER is the hypothenuse of a right-angle triangle made by the common rafter with the ridge corresponding with the right-angle triangle made by the hip rafter with common rafter and plate; and, therefore, the rules for the lengths and cuts of valley rafters are the same as for hip rafter.

Jack Rafters.

The JACK RAFTERS are usually spaced either 16 inches apart or 24 inches apart, and, as they lie against the hip or valley equally spaced, the second jack rafter must be twice as long as the first, the third three times as long as the first, and so on.

The reason for 16 and 24 inch spacing on Jack Rafters is because laths are 48 inches long, therefore the rafter must be 16 or 24 inches so the lath may be nailed to it.

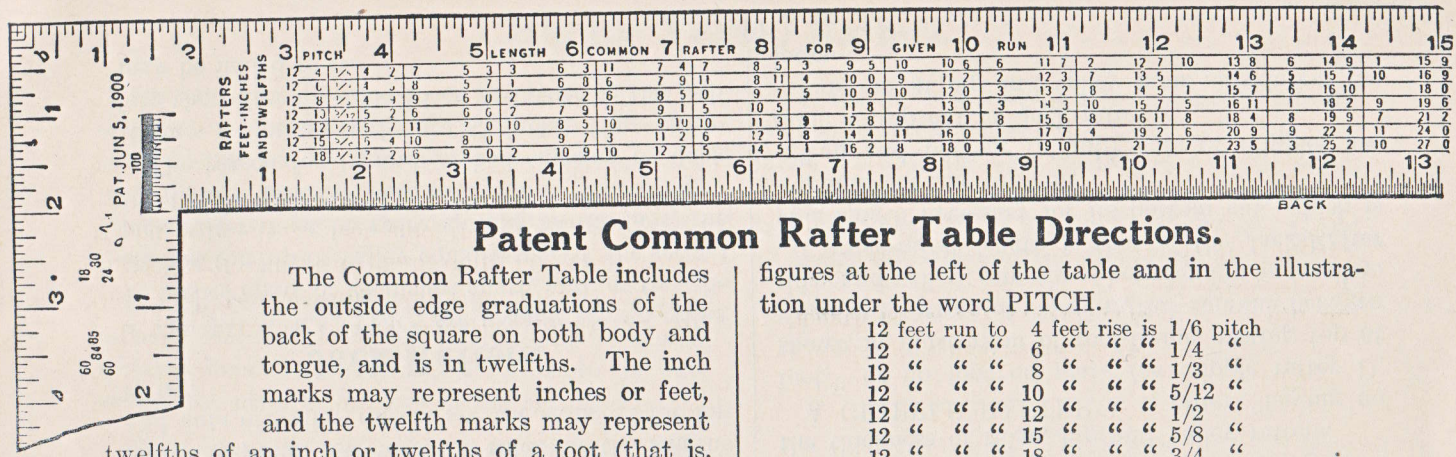
NOTE.—In the tables the common rafter length is given to the center of the ridge, and so with the hip-rafter length. The jack-rafter length is given to the center of its hip or valley rafter. In using the tables, make allowances indicated, depending upon the thickness of ridge, hip and valley rafters.

A CRIPPLE RAFTER is a rafter "having no foot," or no foot on plate (as cripple rafter D, shown in illustration of roof-frame, resting top at ridge and bottom of valley rafter) running between ridge and valley; sometimes between hip and valley.

Cripple-rafter length is that of the Jack-Rafter plus length necessary for its bottom cut, which is a plumb cut like top cut.

Top and bottom (plumb) cuts of cripples are same as top cut for jack rafter.

Side cut at hip and valley same as side cut for jacks.



Patent Common Rafter Table Directions.

The Common Rafter Table includes the outside edge graduations of the back of the square on both body and tongue, and is in twelfths. The inch marks may represent inches or feet, and the twelfth marks may represent twelfths of an inch or twelfths of a foot (that is, inches) as a scale. The edge graduation figures above the table represent the "run" of the rafter, and under the proper figure on the line representing the "pitch," will be found in the table, the rafter length required. The "pitch" is represented by the figures at the left of the table and in the illustration under the word PITCH.

12	feet	run	to	4	feet	rise	is	1/6 pitch
12	"	"	"	6	"	"	"	1/4 "
12	"	"	"	8	"	"	"	1/3 "
12	"	"	"	10	"	"	"	5/12 "
12	"	"	"	12	"	"	"	1/2 "
12	"	"	"	15	"	"	"	5/8 "
12	"	"	"	18	"	"	"	3/4 "

The length of common rafter given in table is from center of ridge-board to outer edge of plate. In actual practice deduct for one-half thickness of ridge-board; and add for any projection beyond the plate or eave.

To Find the Length of a Common Rafter.

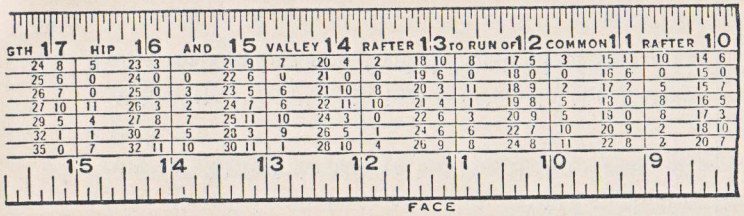
For a roof with 1/6 pitch (or the "rise" 1/6 the width of the building) and having a "run" of 12 feet; follow in the Rafter Table the upper or 1/6 pitch ruling; find, under the graduation figure 12, the rafter length required, which is 12, 7, 10 or 12 feet 7 10/12 inches.

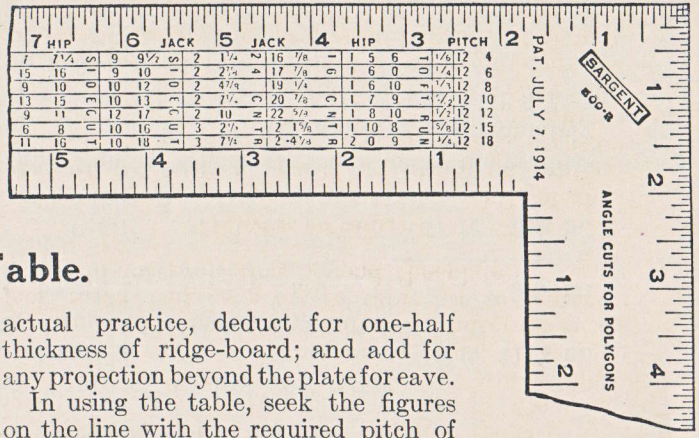
If the "run" is 11 feet, and the "pitch" 1/2 (or the "rise" 1/2 the width of the building) then the rafter length will be 15, 6, 8, or 15 feet 6 8/12 inches. If the "run" is 25 feet, add the rafter length for "run" of 20 feet to the rafter length for "run" of 5 feet.

When the "run" is in inches, then in the Rafter Table read inches and twelfths instead of feet and inches. For instance, if with 1/2 pitch, the "run" is 12 feet 4 inches, add the rafter length of 4 inches to that of 12 feet, as follows:

For "run" of 12 feet the rafter length is.....	16 ft. 11 8/12 in.
For "run" of 4 inches the rafter length is.....	5 8/12 in.
Total.....	17 ft. 5 4/12 in.

The "run" of 4 inches is found under the graduation "4" and is 5, 7, 11, which is approximately 5 8/12 inches. If it were feet, it would read 5 feet 7 11/12 inches.





Patent Hip Rafter Table.

The Hip Rafter Table (patented July 7, 1914) on the Sargent Square is used substantially as the Sargent Table for common rafter (see pages 20 and 21), and in connection with the Hip Rafter Table the outside edge graduation figures represent the "run" of common rafters.

The length of rafter given in the table is from center of ridge-board to outer edge of plate. In actual practice, deduct for one-half thickness of ridge-board; and add for any projection beyond the plate for eave.

In using the table, seek the figures on the line with the required pitch of the roof.

These directions apply to Sargent Squares having tongue $1\frac{3}{4}$ inches wide, Nos. 500R, 503R and 600R furnished 16-inch tongue.

Explanation of Hip Rafter Table.

(See Cut on page 22.)

In the Table to the Right under heading "Pitch."

The set of three columns of figures gives the pitch; the seven pitches in common use, as 1/6-12-4 (for each 12 inches run a 4-inch rise).

Under the first heading "Hip."

This set of figures gives for each of said pitches the length of hip and valley rafter per foot of run of common rafter—as, for 1/6 pitch, 1 foot 5 9/12 inches.

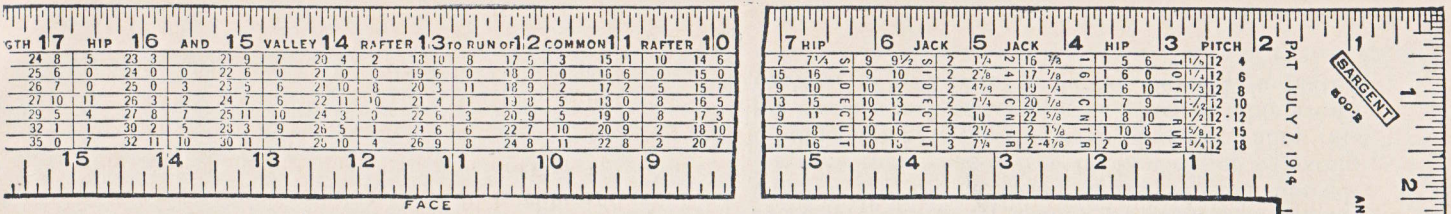
Under the first heading "Jack."

(16 inches on center.)

This set of figures gives the length of the shortest jack rafter, spaced 16 inches on center, which is also the increase in length of each succeeding jack rafter—as 16 7/8 inches for 1/6 pitch. (Deduct for half the thickness of hip or valley rafter because jack rafter lengths given in table are to centers Also add for projection beyond the plate.)

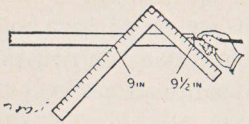
(24 inches on center.)

The next set of figures gives the length of the shortest jack rafter, spaced 24 inches on center, which is also the increase in length of each succeeding jack rafter—as 2 feet 1 1/4 inches for 1/6 pitch. (Deduct for half the thickness of hip or valley rafter because jack rafter lengths given in table are to centers. Also add for projection beyond the plate.)



Under the second heading "Jack."

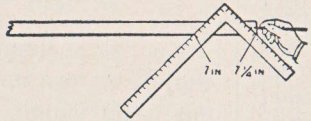
The next set of figures gives the side cut of jacks against hip or valley rafter—as 9—9½ for 1/6 pitch (mark on the 9½ side).



NOTE.—The jack top and bottom cuts (or plumb and heel cuts) are same as for common rafter. (Take 12 on body of square and take on tongue the figure which represents the rise per foot of the roof.)

Under the second heading "Hip."

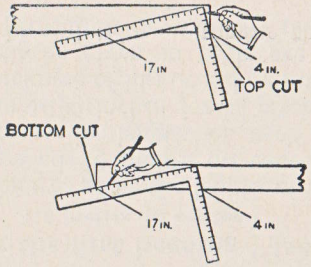
The next set of figures gives the side cut of hip and valley rafter against ridge-board or deck—as 7—7¼ for 1/6 pitch (mark on the 7¼ side).



To get the cut of the sheathing and shingles (whether hip or valley) reverse the figures under hip—as 7¼-7 instead of 7-7¼.

NOTE.—For (hip) top and bottom cuts take 17 on body of Square and take on tongue the figure which represents the rise per foot of the roof.

Illustrations below show 1/6 pitch.



For (hip) top and bottom cuts with ¼ pitch take 17 on body and 6 on tongue, etc.

Under heading "Hip and Valley."

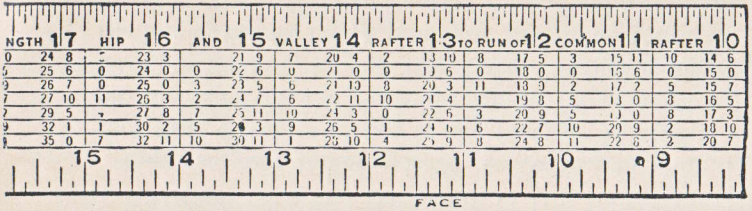
Following in the table are given, for each pitch, the length of hip or valley rafter to run of common rafter—as for roof having 1/6 pitch, under the figure 12 (representing the run of common rafter or half the width of the building) along the 1/6 pitch line of figures, find 17, 5, 3 read 17 feet 5 3/12 inches (deduct for half the thickness of ridge-board and add to cover eave overhang beyond the plate), the result is the length of hip or valley rafter required for roof of 1/6 pitch and common rafter run of 12 feet.

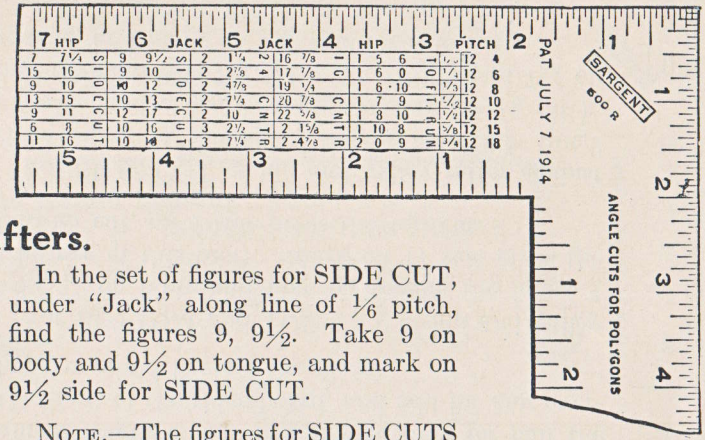
EXAMPLE.—To find the length of Hip Rafter.

Suppose your building is 24 feet wide and your roof rises 4 feet (4 inches to the foot) or 1/6 pitch; on the back of the Sargent Square (Nos. 500R, 503R and 600R, in the Hip Rafter Table, along the line of figures for 1/6 pitch and under the graduation figure 12 (representing half the width of the building, and the run of the common rafter), find 17, 5, 3, which reads 17 feet 5 3/12 inches, the required length of hip or valley (deduct for half the thickness of the ridge-board, and add for any overhang required beyond the plate).

For BOTTOM and TOP CUT of hip and valley take 17 on body and take on tongue the figure 4 (the rise of this roof). Mark on 17 side gives the bottom cut, on 4 side gives the top cut.

For SIDE CUT of hip and valley rafter against ridge-board, in the set of figures for "Side Cut," in table under "Hip" along the line for 1/6 pitch, find the figures 7, 7 1/4. Use 7 on body and 7 1/4 on tongue, and mark on 7 1/4 side for side cut.





Jack Rafters.

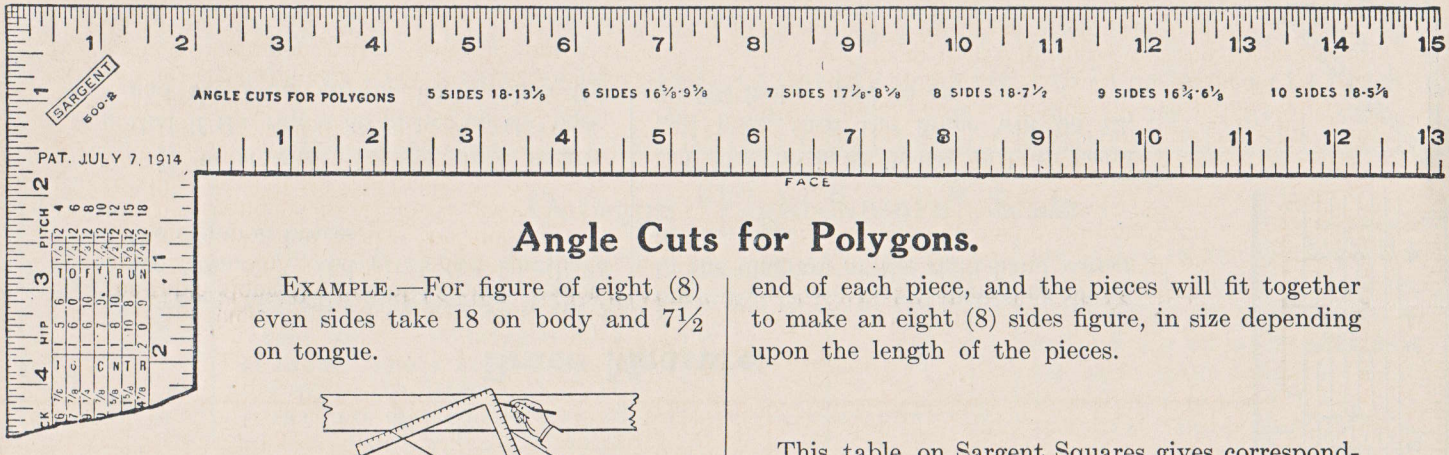
If the jacks are spaced 16 inches on centers, in the table along the line of 1/6 pitch, under "JACK" find 16 7/8, which is the length in inches of the shortest jack, and is also the amount to be added for the second jack. (Figures given are on centers, so allow for half the thickness of hip and make each jack so much shorter than the table length.) Allow also for overhang at eave, if any, beyond the outer edge of plate.

The BOTTOM and TOP CUTS of jacks are same as common rafter—take 12 on body and 4 on tongue.

In the set of figures for SIDE CUT, under "Jack" along line of 1/6 pitch, find the figures 9, 9 1/2. Take 9 on body and 9 1/2 on tongue, and mark on 9 1/2 side for SIDE CUT.

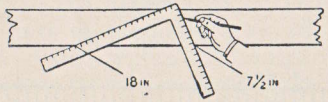
NOTE.—The figures for SIDE CUTS of jacks are also correct figures for cuts for the valley moulding at junction of two gables, etc.

In stair building, as a rule, the stringers rise on a rough floor; therefore, allow for the thickness of finished floor in measuring for the first rise.



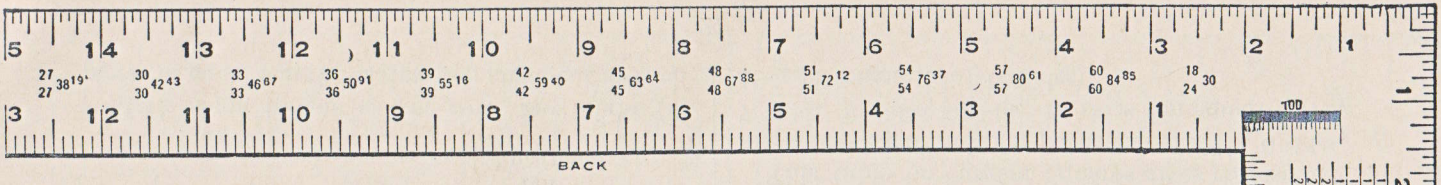
Angle Cuts for Polygons.

EXAMPLE.—For figure of eight (8) even sides take 18 on body and 7½ on tongue.



Mark along tongue as per cut. Saw eight (8) pieces of equal length, having this angle-cut at each end of each piece, and the pieces will fit together to make an eight (8) sides figure, in size depending upon the length of the pieces.

This table on Sargent Squares gives corresponding figures accurately for polygons—5 sides, 6 sides, 7 sides, 8 sides, 9 sides, 10 sides (on squares with 18-inch tongue 5 to 12 sides).

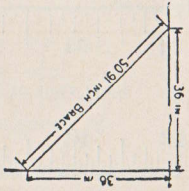


Brace Measure.

This is along the center of the back of the "tongue," and gives the length of the common braces.

36 36 50 91 ——— in the scale means, that if the run is 36 inches on the post, and the same on the beam, then the brace will be 50, 91-100 inches, as shown in the diagram at the right-hand corner of this page.

If the run is 51 inches on both beam and post, then the brace will be 72, 12-100 inches, and so on.

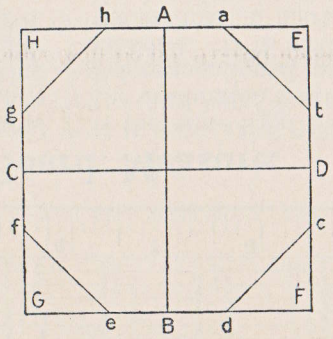


Octagon "Eight-Square" Scale.

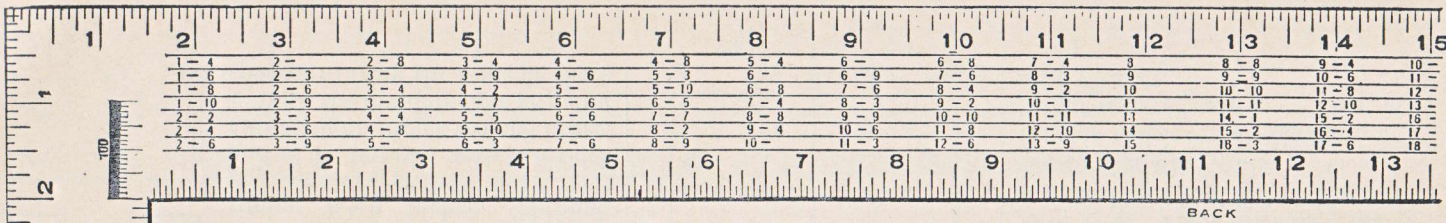
This scale is along the middle of the face of the tongue, and is used for laying off lines to cut an "eight square" or octagon stick of timber from a square one.

Suppose the figure A, B, C, D, is the butt of a square stick of timber 6 x 6 inches. Through the center draw the lines A B and C D, parallel with the sides and at right angles to each other.

With the dividers take as many spaces (6) from the scale as there



are inches in the width of the stick, and lay off this space on either side of the point A, as A a and A h; lay off in the same way the same space from the point B, as B d, B e; also C f, C g and D b, D c. Then draw the lines a b, c d, e f and g h. Cut off the solid angle E, also F, G and H; this will leave an octagon, or "eight-square" stick. This is nearly exact.



Essex Board Measure.

The figure 12 in the graduation marks on the outer edge represents a one-inch board 12 inches wide and is the starting point for all calculations; the smaller figures under the 12 represent the length.

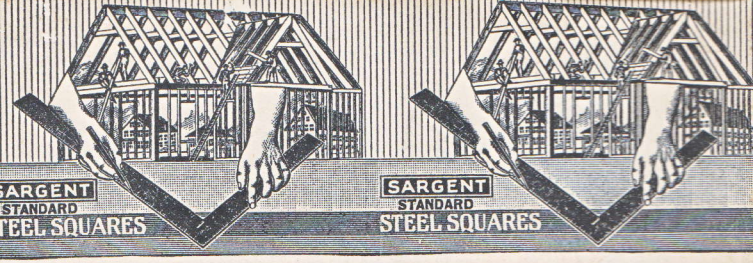
A board 12 inches wide and 8 feet long measures 8 square feet, and so on down the table. Therefore to get the square feet of a board 8 feet long and 6 inches wide find the figure 8 in the scale under the 12 inch graduation mark and pass the pencil along to the left on the same line to a point below the graduation mark 6 (representing the width of the board), and you stop on the scale at 4, which is four feet, the board measure required. If the board is the same length and 10 inches wide, look under the graduation mark 10 on a line with the figure 8 before mentioned and you find 6 and 8-12 feet board measure. If 18 inches wide, then to the right under the graduation mark 18, and 12 feet is found to be the board measure. If 13 feet long and 7 inches wide, find 13 in the scale under the 12 inch graduation, and on the same line under the 7 inch graduation will be found 7 and 7-12 feet board measure. If the board is half this length, take half of this result; if double this length then double the result. For stuff 2 inches thick double the figures.

In this way the scale covers all lengths of boards, the most common, from 8 to 15 feet, being given.

A Commendation.

We frequently receive letters from carpenters relative to the durability and quality of our Steel Squares. Here is one from a carpenter who has been using a No. 100BR:

"My square is in good condition after seven years of use in knocking concrete from lumber in order to get my pencil on the lumber itself. The white markings are as plain as when I got it, and I expect it to last me another seven years if some one else doesn't need it worse than I do and borrow it."



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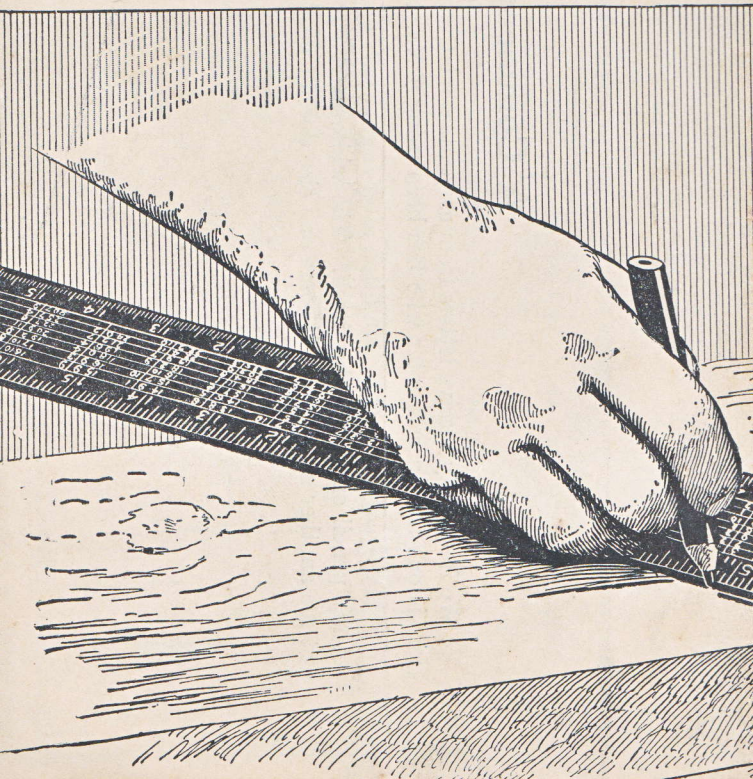
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